Technology, Leadership and Effectiveness

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THE ARMY'S VISION for transformation involves striking, almost revolutionary, technological innovations to enhance the information management and combat efficiency of what is arguably the finest land force in warfare's history. The smaller yet more lethal force, capable of rapid deployment to any remote corner of the globe, will be the world's most technologically advanced power-projection instrument. Through innovations in guidance and information technology, the Army can place overwhelming ordnance on target with more speed, precision and accuracy and report the results faster than any of our potential foes can imagine. In fact, one might argue that we are in the midst of a lethality revolution.

The digital battlefield will fundamentally change uncertainty as well. Instantaneous tactical situation updates, precise reporting and navigation, and logistic data fed directly and accurately to all with the need to know and the capability to do something about it will reduce some factors related to battlefield uncertainty. Commanders and staffs will be able to make more informed decisions and transmit them immediately to the units responsible for applying them. While digital technology will inevitably result in some new and improved uncertainties, we should expect an order-of-magnitude increase in firepower and information efficiency.

The key issue is whether the development of an efficient force is sufficient. Technology can never eliminate human nature and the fog, error, unpredictability and heroism that come with it. If we accept that combat generally runs in observation-orientation-decision-action cycles, then digital technology will increase the speed and fidelity of our ability to observe, orient and decide. In a critical moment between decision and action, individuals and units either implement those decisions or refuse, and courage and resolution or fear and panic prevail.[1] In that moment reigns humanity, which no amount of technology can overcome. The deciding factor in the critical moment is the quality of leadership and the resilience of the organization.

Is the development of an efficient force truly our vision for the Army of the 21st century? Technology can never eliminate human nature and the fog, error, unpredictability and heroism that come with it. . . . Technology certainly increases our efficiency, but we must accept that it is, in itself, an incomplete framework for creating the quality of force we need in the next quarter-century.

Technology certainly increases our efficiency, but we must accept that it is, in itself, an incomplete framework for creating the quality of force we need in the next quarter-century. As Greek philosopher Aristotle argued over 2000 years ago, "whenever skill and knowledge come into play, these two must be mastered: the end and the actions which are the means to the end."[2] Greater efficiency through technology is an important means to the end, but it is not an end in itself. The true goal is the development of excellence.

To achieve excellence we must combine efficiency with things and effectiveness with people.[3] True transformation means developing both components with equal vigor. If we focus solely on improving efficiency as a means to achieve excellence, but neglect human effectiveness, we will soon find that we have arrived at the wrong address.

Learning the Lesson

The experience of warfare in the early 20th century warns that when seeking battlefield excellence, technical innovation alone is no panacea. World War I, the first conflict to experience a fundamental technological and communications revolution, showed the limits of technical solutions to battlefield effectiveness. The cable, the field telephone and in some cases the wireless telephone were the early 20th-century answers to the command and control

nightmare created as mass armies locked in materiel warfare. These communications innovations, so it was thought, would give the command post real-time tactical information with which the commanders and staffs could make and transmit decisions rapidly. At Ypres, Verdun, the Somme and Passchendaele soldiers went over the top while commanders and staffs went into bunkers and dugouts. While leaders armed with new communication technology manned telephones and awaited information on the progress of the offensive, their soldiers ventured into no man's land and were mowed down. The commanders and staffs were quite efficient, but their armies were completely ineffective. Not until 1917 did the Germans develop an intelligent response to the technologically driven attrition warfare.

The significant technological breakthroughs which we are about to embrace offer us some important choices. We can travel along the path of centralization and zero-defect mentality and place a primacy on efficiency as did our predecessors in World War I, or we can move along the path of excellence by coupling efficiency through technological innovation with effectiveness through the development of leadership, institutional culture and organizational climate.

This response, known as *Hutier* or storm troop tactics, was not merely a tactical improvement; it was a cultural innovation. Relying on the tradition of independence and initiative developed by Prussian General Gerhard Johann David von Scharnhorst and later refined by Prussian General Helmuth von Moltke, the Elder, the Germans developed a framework that restored fluidity to positional warfare. While the German Army eventually collapsed under the combined weight of the American, British and French forces and its own flagging morale, the doctrine of mission orders and decentralized execution had once again found currency. This doctrine (termed *Auftragstaktik* after World War II) was later used to devastating effect from 1939 to the winter of 1942—when Adolf Hitler and his henchmen, much to the dismay of many field commanders, rejected independence and initiative in favor of obedience and the "fixed defense." Later *Auftragstaktik* was employed in isolated incidents until 1945, but by then the culture of the *Wehrmacht* as a whole had fundamentally changed.

Auftragstaktik, the concept praised by advocates of maneuver warfare, was not so much a tactical doctrine, as many mistakenly believe, it was a cultural weltanschauung (worldview). Through *Auftragstaktik* the Germans were able to establish a paradoxical framework in which the martial virtues of discipline and obedience could coexist with independence and initiative.[4] The commander's intent—what he wanted to accomplish—was the unifying force in tactical and operational decision making. Within this framework the subordinate commanders were expected to use their initiative and judgment to fulfill the commander's intent and act independently when their initial orders no longer reflected the reality of a changed situation—as long as their actions operated within the framework of the commander's intent. To illustrate this point, German officers often pointed to the admonishment by Prince Frederick Charles to a blundering major who claimed that he was just following orders: "His majesty made you a major because he believed that you would know when *not* to obey his orders." With this particular cultural mindset the German army achieved qualitative excellence and defeated opponents who were often numerically and technologically superior.

Choosing the Right Path

We are at a crossroads today not unlike that which faced our predecessors in World War I. The significant technological breakthroughs that we are about to embrace offer us some important choices. We can travel along the path of centralization and place a primacy on efficiency as did our predecessors in World War I, or we can move along the path of excellence by coupling efficiency through technological innovation with effectiveness through the development of leadership, institutional culture and organizational climate.

Loosely defined, culture is the set of shared values, beliefs and behavioral patterns of a given society or collectivity. Culture establishes a coherent behavioral framework within which the members are voluntarily expected to act. Army values encapsulate our institutional culture. Additionally, according to Army leadership doctrine, "an organization's climate is the way its members feel about their organization. Climate comes from people's shared perceptions and attitudes, what they believe about the day-to-day functioning of their outfit."[5] As professional soldiers, leaders need to address issues of culture and climate along with those of technology. Technology leads to efficiency, but effectiveness is only achieved through a healthy culture and climate. Ultimately, the nature of the institutional culture and organizational climate primarily determine the difference between excellence and ineffectiveness. Developing leadership should be the first priority since it is the key to forging an

effective organizational climate.

US Army Field Manual 100-5, *Operations*, asserts that leadership, rather than firepower, protection or maneuver, is the most important dynamic of combat power, which suggests where attention should focus. And yet, day to day the more-visible aspects of combat power are all-consuming, and even over the long-term challenges such as the impact of technology are familiar distractors. Perhaps even more troubling is the use of information technology to micromanage subordinate leaders and organizations. The mere ability to gather and process information can increase the appetite for it, regardless of utility. Subordinate leaders then find themselves consumed with reacting and responding to directives and requests for information rather than exercising initiative and judgment within guidelines established by their leaders—a peacetime habit that could be disastrous in combat.

While enhanced technology improves efficiency with information and materiel, increased efficiency does not necessarily portend greater effectiveness with people. To paraphrase General George S. Patton, wars may be fought with weapons, but they are won by soldiers. Raising the qualitative level of excellence means increasing the effectiveness of units and soldiers through a revitalized attention to leadership and organizational climate.

Joint Combat Camera

A team of para-rescue specialists aboard a UH-60 Blackhawk work to save two "wounded" soldiers during an exercise in Korea.

If competition is against a clearly defined performance standard and units are rewarded on the basis of meeting that standard, then we begin to align desired results with the value of teamwork. Everybody can win, nobody can win or a happy medium. Beating the standard is what matters at the organizational level, not beating each other. We now begin to establish an environment in which teamwork can take place.

Effectiveness through Results and Values

An effective organization combines desired performance results with healthy, shared values. The human force of leadership synergizes these results and values to form the organizational climate. A winning, healthy climate developed through leadership makes an organization effective. Because an organization is made up of component units, like any living organism, it is only completely healthy when all of its component units are. Therefore, the desired culture must be inculcated throughout the institution and the

desired climate throughout Army organizations via the leaders. The task for organizational leaders is then twofold. First, they must clearly define and align results and values at the top; then develop subordinate leaders to operate willingly within that performance and behavioral framework. A simple typology illustrates the necessity of nurturing this synergy as well as the danger of affirming a "performance only" culture.

The last type of leader gets great results but fails to uphold the values of the organization. This situation is deceptive because the results are there. However, this person's dysfunctional behavior is dangerous and rewarding it is cancerous. Left unchecked, it may lead to destructive competition and selfish individualism, both of which are anathema to an effective organization.

According to Jack Welch, CEO of General Electric, those in charge of units generally fall into one of four broad categories.[6] The first type of leader accomplishes great results while upholding the values of the organization. This leader has established a healthy, winning climate inside the unit and is the type of person we need to recognize, reward, mentor and prepare for greater responsibility. The second type of leader accomplishes poor results with no values. This one is an easy call and should be encouraged to make a new career choice very quickly. The third type achieves poor results but still operates within the values of the organization. Such people still have potential. Because they uphold the values of the organization, they should be coached, allowed to learn from mistakes and given the opportunity to improve. Given the chance and the mentoring, many of these soldiers will become leaders of the first type.

The last type of leader gets great results but fails to uphold the values of the organization. This situation is deceptive because the results are there. However, this person's dysfunctional behavior is dangerous and rewarding it is cancerous.[7] Left unchecked, it may lead to destructive competition and selfish individualism, both of which are anathema to an effective organization. We all realize that we should help this type of person make a new career choice as well, but instead we often find ourselves rewarding behavior we instinctively despise because of the results. This becomes our own leadership failure, and we must be willing to change our response to this type of person.

The fundamental difference between the third and fourth type of leader is the impact each has on the organization. Because the third type exhibits constructive behavior, training can overcome the shortcomings in results unless the person simply lacks ability. The fourth type exhibits destructive behavior, which has a decidedly negative impact on the organization as a whole. His unit may look good, but selfish individualism will compromise the overall organizational effectiveness.

Furthermore, the results attained by this sort of person are always short term. While the unit may look good from the outside, it is often rotting on the inside—shiny boots hiding trenchfoot. Subordinates will either be disillusioned by or will imitate the behavior of their superior, especially if that behavior is rewarded, and over a period of time the unit will always fall apart. Unfortunately, because leaders, particularly officers, remain in charge of units only briefly, the dysfunctional nature of the unit often becomes apparent only after the perpetrator has left. A person who proudly proclaims that the unit was great while he was there but fell apart after he left merely admits that his dysfunctional leadership focused on short-term results with blatant disregard for the long-term, positive development of subordinates. An effective leader leaves behind an effective unit; a dysfunctional one leaves behind a dysfunctional unit. A unit takes on the character of its leader, and the impact is long lasting.

Restoring Character

Leaders are responsible to align results and values to train and evaluate subordinates against the backdrop of organizational climate. Just as clearly defined and attainable standards help achieve desired performance results, clearly defined values are crucial to organizational effectiveness. We then set the behavioral example by walking our talk and by holding our subordinate leaders accountable to that standard. An effective, healthy, winning organizational climate is achieved when we align results and values, hold ourselves accountable to those standards first, then expect the same of our subordinates.

For instance, if we consider teamwork as one of our critical organizational values, then attempting to improve results by pitting units against each other and rewarding the winner would be an example of a failure to align.[8] In this scenario there is only one winner, and the rest are losers—we are talking teamwork but rewarding (walking) individualism. We can talk teamwork all we want, but all our subordinates will hear is individualism because actions diminish words.

On the other hand, if the competition is against a clearly defined performance standard and units are

rewarded on the basis of meeting that standard, then we begin to align desired results with the value of teamwork. Everybody can win, nobody can win or a happy medium. Beating the standard is what matters at the organizational level, not beating each other. We now begin to establish an environment in which teamwork can take place. The key is to train and reinforce the desired attitude and behavior and make the value of teamwork a reality in the organization.

Certainly, we will never completely eliminate people's desire to compete and outdo each other. Nor should we. Such competition can be very healthy and a spur to performance in the right context. The difference is whether we allow these tendencies to become dysfunctional behavior at the organizational level, or merely manifest themselves as friendly competition among team members. A good test of the system is to see whether the competition encourages the cross-talk and exchange ideas that make individual teams and the organization more effective.

Leadership plays the decisive role in formatting culture and climate. As a result, conscious choice to develop the leadership is necessary to foster healthy, winning organizations. In doing so, several points are important to inculcating this type of leadership and climate within an organization. First, leaders must rely on Army values as the cornerstone of effectiveness, both in terms of a leader's character and in terms of the organization as a whole. They then define these and other organization-specific values, making them as understood throughout the organization as performance standards. Using Appendix B of Field Manual 22-100, *Army Leadership*, leaders should integrate these values into monthly performance counseling and empower subordinates inform them of any alignment problems within the organization.

Furthermore, leaders must make clear the consequences of achieving short-term results through dysfunctional behavior. Perhaps most important, they must realize that leadership based on character begins on the inside. Leaders must hold themselves to these standards first before expecting them of anyone else—a soldier can spot a hypocrite very quickly and will never follow one. These important issues have no easy answers or quick-fix solutions, but they are critical in creating effective Army units.

The results attained by selfish, individualist leaders are always short term. While the unit may look good from the outside, it is often rotting on the inside—shiny boots hiding trenchfoot. Subordinates will either be disillusioned by or will imitate the behavior of their superior, especially if that behavior is rewarded, and over a period of time the unit will always fall apart.

The Army needs to embrace sweeping technological innovations. Efficient communications, logistic and weapon systems are crucial to maintaining a qualitative edge over any potential foe. Efficiency, though, is only the lesser half of the battle. To achieve excellence, leaders need to invest at least as much energy in upgrading the unit effectiveness, developing leaders who live our institutional values and set the proper organizational climate. Technology can improve efficiency, but only leadership can enhance effectiveness. An effective organization accomplishes superior results within the framework of healthy, shared values and provides an environment within which people will naturally want to work together and excel. To achieve such excellence, the Army must develop these qualities of effectiveness through leadership with the same rigor devoted to efficiency through technology. ***MR***

NOTES

1. For further development see Christopher D. Kolenda, "Between Decision and Action: Leadership at the Critical Moment," *Armor* (May-June 2000).
2. *Aristotle, Politics, Book 7*, written in 350 B.C., trans. Benjamin Jowett, xiii, 1331 b24-b39.
3. Stephen Covey, *The 7 Habits of Highly Effective People: Restoring the Character Ethic* (New York: Simon and Schuster, 1989), 170-1.
4. Trevor N. Dupuy, *A Genius for War: The German Army and General Staff, 1807-1945* (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1977), 302-307.
5. US Army Field Manual 22-100, *Army Leadership* (Washington, DC: US Government Printing Office, August 1999), 3-12.
6. Jack Welch, Chief Executive Officer of General Electric, uses this typology in outlining the importance of values in his organization. For a further discussion see Lynne Joy McFarland, Larry E. Senn and John R. Childress, eds., *21st Century Leadership: Dialogues with 100 Top Leaders* (New York: The Leadership Press, 1993), 152-153.
7. Marcus Tullius Cicero, *De Officiis* (Oxford University Press, June 1994). Cicero wrote eloquently in cautioning the Romans to be wary of unprincipled people with unbridled ambition.
8. Another example is to talk initiative but then overmanage the daily activities of subordinates. Stephen Covey, *The 7 Habits of Highly Effective People: Restoring the Character Ethic*, uses the notion of alignment to discuss the causes of dysfunctional behavior in organizations, 229-230.

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